What is claimed is:

1. A scanning optical system for dynamically deflecting a laser beam emitted from a light source by a deflecting system, converging the dynamically deflected laser beam by an imaging optical system into a spot beam on a scan target surface, and thereby scanning the spot beam in a main scanning direction on said scan target surface, comprising:

an optical element being placed on an optical path between said light source and said deflecting system,

said optical element including:

a central area transmitting part of the laser beam in the vicinity of a central axis of the laser beam;

at least one light blocking area blocking part of the laser beam incident on part of said optical element outside said central area; and

at least one light transmitting area transmitting part of the laser beam incident on part of said optical element other than said central area and said light blocking area.

2. The scanning optical system according to claim 1, wherein said central area and said at least one light transmitting area give the same phase to beams passing therethrough.

3. The scanning optical system according to claim 1, wherein

said optical element includes a pair of said light blocking/transmitting areas.

4. The scanning optical system according to claim 3,

wherein said at least one light blocking area is placed outside said central area to adjoin thereto,

wherein said at least one light transmitting area is placed outside said at least one light blocking area to adjoin thereto.

5. The scanning optical system according to claim 4, wherein each of said at least one light blocking area and said at least one light transmitting area is placed to be on both sides of said central area in regard to the main scanning direction.

6. The scanning optical system according to claim 5, wherein each of said at least one light blocking area and said at least one light transmitting area is placed symmetrically with respect to said central area in regard to the main scanning direction.

7. The scanning optical system according to claim 3, wherein a cross section of the laser beam incident on said optical element taken along a plane perpendicular to the central axis has an elliptical form.

8. The scanning optical system according to claim 7, wherein

the elliptical cross section of the laser beam has its major axis in the main scanning direction.

9. The scanning optical system according to claim 3, wherein a distance "ha1" between the central axis of the laser beam incident on said optical element and an inner edge of said light blocking area measured in the main scanning direction, a distance "ha2" between the central axis of the laser beam and an outer edge of said light blocking area measured in the main scanning direction, and a radius "hmax" of a cross section of the laser beam incident on said optical element measured in the main scanning direction satisfy a condition:

$$0.70 < ((ha1 + ha2)/2)/hmax < 0.85 \quad \cdots (1).$$

10. The scanning optical system according to claim 1, wherein said optical element includes two or more pairs of said light blocking/transmitting areas.

11. The scanning optical system according to claim 10, wherein said light blocking areas and said light transmitting areas are arranged alternately outward from said central area.

12. The scanning optical system according to claim 11, wherein said light blocking areas and said light transmitting areas are arranged alternately in regard to the main scanning direction.

13. The scanning optical system according to claim 12, wherein each of said light blocking areas is placed symmetrically with respect to said central area in regard to the main scanning direction.

14. The scanning optical system according to claim 12, wherein each of said light transmitting areas is placed symmetrically with respect to said central area in regard to the main scanning direction.

15. The scanning optical system according to claim 10, wherein a cross section of the laser beam incident on said optical element taken along a plane perpendicular to the central axis has an elliptical form.

16. The scanning optical system according to claim 15, wherein the elliptical cross section of the laser beam has its major axis in the main scanning direction.

17. The scanning optical system according to claim 14, wherein a distance "hb1" between the central axis of the laser beam incident on the optical element and an inner edge of an outermost one of said light blocking areas measured in the main scanning direction, a distance "hb2" between the central axis of the laser

beam and an outer edge of the outermost light blocking area measured in the main scanning direction, and a radius "hmax" of a cross section of the laser beam incident on said optical element measured in the main scanning direction satisfy a condition:

$$0.85 < ((hb1 + hb2)/2)/hmax < 0.95 \quad \cdots (2).$$

18. The scanning optical system according to claim 17, wherein a distance "hc1" between the central axis of the laser beam incident on the optical element and an inner edge of an innermost one of said light blocking areas measured in the main scanning direction, a distance "hc2" between the central axis of the laser beam and an outer edge of the innermost light blocking area measured in the main scanning direction, and the radius "hmax" of the cross section of the laser beam measured in the main scanning direction satisfy a condition:

$$0.65 < ((hc1 + hc2)/2)/hmax < 0.75 \quad \cdots (3).$$

19. The scanning optical system according to claim 17, wherein said scanning optical system satisfies a condition:

$$0.20 < Sa/(Sa + Sb) < 0.75 \quad \cdots (4)$$

where Sa represents a size of a portion of the innermost one of said light blocking areas, the laser beam being incident on the innermost one of said light blocking areas within the portion of the innermost one, and Sb represents a size of a portion of

the outermost one of said light blocking areas, the laser beam being incident on the outermost one of said light blocking areas within the portion of the outermost one.

20. The scanning optical system according to claim 1, wherein said scanning optical system satisfies a condition:

$$0.03 < S'/S < 0.30 \quad \cdots (5)$$

where S' represents a size of a portion of said at least one light blocking area, the laser beam being incident on said at least one light blocking area within the portion of said at least one light blocking area, and S represents a size of a cross section of the laser beam incident on said optical element taken along a plane perpendicular to the central axis.

21. The scanning optical system according to claim 1, wherein said imaging optical system is implemented by an optical system including a reflecting surface.

22. The scanning optical system according to claim 1,

wherein said optical element further includes a shading part as an aperture stop,

wherein said at least one light blocking area and said at least one light transmitting area are placed in an aperture of said shading part.

23. A printer comprising a scanning optical system for dynamically deflecting a laser beam emitted from a light source by a deflecting system, converging the dynamically deflected laser beam by an imaging optical system into a spot beam on a scan target surface, and thereby scanning the spot beam in a main scanning direction on said scan target surface,

said scanning optical system including:

an optical element being placed on an optical path between said light source and said deflecting system,

said optical element including:

a central area transmitting part of the laser beam in the vicinity of a central axis of the laser beam;

at least one light blocking area blocking part of the laser beam incident on part of said optical element outside said central area ; and

at least one light transmitting area transmitting part of the laser beam incident on part of said optical element other than said central area and said at least one light blocking area.